OBSERVATIONS & RECOMMENDATIONS

After reviewing data collected from **WEBSTER LAKE, FRANKLIN,** the program coordinators have made the following observations and recommendations:

Thank you for your continued hard work sampling the lake this season! Your monitoring group sampled the deep spot **three** times this season and has done so for many years! As you know, multiple sampling events each season enable DES to more accurately detect water quality changes. Keep up the good work!

DES has been actively involved in two projects near Webster Lake. The first project is the Department of Transportation (DOT) Route 11 realignment in Franklin and Andover. The second project is located within the Sucker Brook watershed.

New Hampshire Route 11 Realignment
In 2003, DES Biology Section met with Department of Transportation (DOT) personnel to discuss stormwater treatment and erosion control associated with the Route 11 realignment along Webster Lake in Franklin. As a result of that meeting, DOT has incorporated both long-term and short-term water quality improvements into the project.

Long-term water quality improvements included installing concrete pavers to infiltrate stormwater at the boat launch parking area and an infiltration trench at the boat launch ramp which will infiltrate runoff, and, therefore, will minimize the potential for sediment, hydrocarbons and other pollutant deposition in the lake.

Short-term water quality improvements included weekly erosion control planning meetings to address potential water quality concerns, project phasing, limiting site disturbance, two or three site inspections and sampling events per week by erosion control specialists and DES, on-site rainfall tracking and recording, and Best Management Practices (BMP) construction to manage intense rainfall events. These improvements were successfully communicated and implemented and detrimental water quality impacts to wetlands, Sucker Brook, Chance Pond Brook and Webster Lake were avoided.

Approximately 90 percent of the project has been constructed, with the remaining 10 percent to be completed by Summer 2006.

Sucker Brook Watershed

On November 12, 2003, DES met with Chuck Bodein and Mark Stetson, health officers for the Town of Franklin and Andover, respectively, to discuss elevated *E. coli* levels in Sucker Brook. The Brook extends from the outlet of Highland Lake in Andover and discharges on the west side of Webster Lake in Franklin. As a result of the meeting, DES became the lead agency to investigate the Brook and its watershed and both Towns agreed to provide volunteer support during stormwater sample collection.

Following the initial subwatershed site investigation by DES in 2003, a scope of work was developed for the Sucker Brook watershed. The Sucker Brook Sampling Team collected seven rounds of samples at 12 stations along Sucker Brook and its tributaries. As a result of these efforts, two areas were identified as having elevated *E.coli* levels. Both areas were tributary streams to Sucker Brook located near Dyers Crossing and Hoyt Road.

More than 40 cows currently have unrestricted drinking water access to a perennial stream that directly discharges to Sucker Brook. After confirming that a nearby farm was partly responsible for elevated *E.coli* levels in Sucker Brook, DES contacted the Natural Resources Conservation Service (NRCS). Under the Environmental Quality Incentives Program (EQIP), NRCS works with local farmers, offering assistance for planning, designing, and installing conservation practices to protect water and properly care for domestic animals.

During the Summer of 2005, NRCS worked closely with the farm owner to secure funding to install a dug well, water line and water storage facility on the property. During the Spring of 2006, fencing will be installed to prevent the cows from accessing the stream. Upon completion of the project, *E.coli* from the cows at the farm will no longer discharge into surface waters and Sucker Brook and ultimately into Webster Lake.

At a separate location, DES conducted follow-up sampling for the Hoyt Road tributary where elevated *E.coli* levels had been documented. After bracketing the stream and properties potentially discharging *E.coli*, it was concluded that elevated *E.coli* levels were not of human or livestock origin, but likely native wildlife populations.

DES congratulates the City of Franklin for applying for and receiving a 2005 DES Watershed Assistance Grant. The goal of this project will be to develop a watershed plan that will summarize the existing and future water quality data, provide lake modeling results, produce a GIS may and a lost of recommendations to improve the present water quality conditions. The watershed management plan will address the US Environmental Protection Agency's nine minimum elements for developing a watershed plan.

FIGURE INTERPRETATION

- **Figure 1 and Table 1:** Figure 1 (Appendix A) shows the historical and current year chlorophyll-a concentration in the water column. Table 1 (Appendix B) lists the maximum, minimum, and mean concentration for each sampling season that the lake has been monitored through VLAP.

  Chlorophyll-a, a pigment found in plants, is an indicator of the algal abundance. Because algae are usually microscopic plants that contain chlorophyll-a, and are naturally found in lake ecosystems, the chlorophyll-a concentration measured in the water gives an estimation of the algal concentration or lake productivity. **The median summer chlorophyll-a concentration for New Hampshire's lakes and ponds is 4.58 mg/m^3.**

  The current year data (the top graph) show that the chlorophyll-a concentration ***increased*** from **June** to **July**, and then ***decreased*** from **July** to **August**.

  The historical data (the bottom graph) show that the 2005 chlorophyll-a mean is ***less than*** the state median and is ***greater than*** the similar lake median (for more information on the similar lake median, refer to Appendix F).

  Overall, the statistical analysis of the historical data (the bottom graph) shows that the mean annual chlorophyll-a concentration has ***not significantly changed*** since monitoring began. Specifically, the chlorophyll-a concentration has ***fluctuated between approximately 2.4 and 7.3 mg/m^3,*** and has ***not continually increased or decreased*** since **1986**. (Note: Please refer to Appendix E for the detailed statistical analysis explanation and data print out.)

While algae are naturally present in all lakes, an excessive or increasing amount of any type is not welcomed. In freshwater lakes, phosphorus is the nutrient that algae depend upon for growth. Algal concentrations may increase as nonpoint sources of phosphorus from the watershed increase, or as in-lake phosphorus sources increase (such as sediment phosphorus releases, known as internal loading). Therefore, it is extremely important for volunteer monitors to continually educate all watershed residents about activities within the watershed that affect phosphorus loading and lake quality.

- **Figure 2 and Table 3:** Figure 2 (Appendix A) shows the historical and current year data for lake transparency. Table 3 (Appendix B) lists the maximum, minimum and mean transparency data for each sampling season that the lake has been monitored through VLAP.

  Volunteer monitors use the Secchi-disk, a 20 cm disk with alternating black and white quadrants, to measure water clarity (how far a person can see into the water). Transparency, a measure of water clarity, can be affected by the amount of algae and sediment from erosion, as well as the natural colors of the water. **The median summer transparency for New Hampshire's lakes and ponds is 3.2 meters.**

  The current year data (the top graph) show that the in-lake transparency ***increased slightly*** from **June** to **July**, and then ***increased greatly*** from **July** to **August**.

  The historical data (the bottom graph) show that the 2005 mean transparency is ***slightly greater than*** the state median and is ***less than*** the similar lake median (refer to Appendix F for more information about the similar lake median).

  Overall, the statistical analysis of the historical data (the bottom graph) shows that the mean annual transparency has ***not significantly changed*** since monitoring began. Specifically, the transparency has ***fluctuated between approximately 3.1 and 5.5 meters*** since **1986**. It is important to point out that visual inspection of the trend line indicates a ***decreasing, meaning worsening,*** transparency trend since monitoring began, ***particularly since 2001.*** If the transparency continues to decrease in future sampling seasons, the worsening trend will become statistically significant. (Note: Please refer to Appendix E for the detailed statistical analysis explanation and data print out.)

Typically, high intensity rainfall causes sediment erosion to flow into lakes and streams, thus increasing turbidity and decreasing clarity. Efforts should continually be made to stabilize stream banks, lake shorelines, disturbed soils within the watershed, and especially dirt roads located immediately adjacent to the edge of tributaries and the lake. Guides to Best Management Practices designed to reduce, and possibly even eliminate, nonpoint source pollutants, such as sediment loading, are available from DES upon request.

- **Figure 3 and Table 8:** The graphs in Figure 3 (Appendix A) show the amount of epilimnetic (upper layer) phosphorus and hypolimnetic (lower layer) phosphorus; the inset graphs show current year data. Table 8 (Appendix B) lists the annual maximum, minimum, and median concentration for each deep spot layer and each tributary since the lake has joined VLAP.

  Phosphorus is the limiting nutrient for plant and algae growth in New Hampshire's freshwater lakes and ponds. Excessive phosphorus in a lake can lead to increased plant and algal growth over time. **The median summer total phosphorus concentration in the epilimnion (upper layer) of New Hampshire's lakes and ponds is 12 ug/L. The median summer phosphorus concentration in the hypolimnion (lower layer) is 14 ug/L.**

  The current year data for the epilimnion (the top inset graph) show that the phosphorus concentration ***decreased*** from **June** to **July**, and then ***remained stable*** from **July** to **August**.

  The historical data show that the 2005 mean epilimnetic phosphorus concentration is ***slightly less than*** the state median and is ***greater than*** the similar lake median (refer to Appendix F for more information about the similar lake median).

  The current year data for the hypolimnion (the bottom inset graph) show that the phosphorus concentration ***decreased*** from **June** to **July**, and then ***increased*** from **July** to **August**.

  The turbidity of the hypolimnion (lower layer) sample was ***elevated*** on each sampling event this season **(ranging from 1.87 on the June sampling event to 6.7 on the August sampling event).** It is important to point out that the hypolimnetic turbidity has been ***at least slightly elevated*** on most sampling events during previous sampling seasons as well. This suggests that the lake bottom is covered by a thick organic layer of sediment which is easily disturbed. When the lake bottom is disturbed, sediment, which typically contains attached phosphorus, is released into the water column. When collecting the hypolimnion sample, make sure that there is no sediment in the Kemmerer Bottle before filling the sample bottles.

The historical data show that the 2005 mean hypolimnetic phosphorus concentration is ***greater than*** the state median and the similar lake median (refer to Appendix F for more information about the similar lake median).

Overall, the statistical analysis of the historical data shows that the phosphorus concentration in the epilimnion (upper layer) has ***significantly decreased*** since monitoring began. Specifically, the phosphorus concentration in the epilimnion has ***decreased*** (meaning ***improved***) on average by ***approximately 3.5 %*** per sampling season during the sampling period **1986** to **2005**. (Note: Please refer to Appendix E for the statistical analysis explanation and data print out.) We hope this trend continues!

Overall, the statistical analysis of the historical data shows that the phosphorus concentration in the hypolimnion (lower layer) has ***not significantly changed*** since monitoring began. Specifically, the phosphorus concentration has ***fluctuated between approximately 19 and 132 ug/L*** since **1986**

One of the most important approaches to reducing phosphorus loading to a waterbody is to continually educate watershed residents about its sources and how excessive amounts can adversely impact the ecology and the recreational, economical, and ecological value of lakes and ponds. Phosphorus sources within a lake's watershed typically include septic systems, animal waste, lawn fertilizer, road and construction erosion, and natural wetlands.

TABLE INTERPRETATION

- **Table 2: Phytoplankton**
  Table 2 (Appendix B) lists the current and historical phytoplankton species observed in the lake. Specifically, this table lists the three most dominant phytoplankton species observed in the sample and their relative abundance in the sample.

  The dominant phytoplankton species observed in the **June** sample were ***Asterionella* (diatom), *Tabellaria* (diatom),** and ***Dinobryon* (golden-brown).**

  The dominant phytoplankton species observed in the **August** sample were ***Ceratium* (dinoflagellate), *Tabellaria* (diatom),** and ***Anabaena* (cyanobacteria).**

Phytoplankton populations undergo a natural succession during the growing season (Please refer to the "Biological Monitoring Parameters" section of this report for a more detailed explanation regarding seasonal plankton succession). Diatoms and golden-brown algae are typical in New Hampshire's less productive lakes and ponds.

- **Table 2: Cyanobacteria**

In addition to the cyanobacteria ***Anabaena*** being the **third-most dominant** species in the **August** plankton sample, a small amount of ***Anabaena*** and the cyanobacteria ***Oscillatoria*** were observed in the **June** plankton sample. ***These species, if present in large amounts, can be toxic to livestock, wildlife, pets, and humans.*** (Please refer to the "Biological Monitoring Parameters" section of this report for a more detailed explanation regarding cyanobacteria).

Cyanobacteria can reach nuisance levels when phosphorus loading from the watershed to surface waters is increased (this is often caused by rain events) and favorable environmental conditions occur (such as a period of sunny, warm weather).

The presence of cyanobacteria serves as a reminder of the lake's delicate balance. Watershed residents should continue to act proactively to reduce nutrient loading to the lake by eliminating fertilizer use on lawns, keeping the lake shoreline natural, re-vegetating cleared areas within the watershed, and properly maintaining septic systems and roads.

In addition, residents should also observe the lake in September and October during the time of fall turnover (lake mixing) to document any algal blooms that may occur. Cyanobacteria have the ability to regulate their depth in the water column by producing or releasing gas from vesicles. However, occasionally lake mixing can affect their buoyancy and cause them to rise to the surface and bloom. Wind and currents tend to "pile" cyanobacteria into scums that accumulate in one section of the lake. If a fall bloom occurs, please collect a sample (any clean jar or bottle will be suitable) and contact the VLAP Coordinator.

- **Table 4: pH**

Table 4 (Appendix B) presents the in-lake and tributary current year and historical pH data.

pH is measured on a logarithmic scale of 0 (acidic) to 14 (basic). pH is important to the survival and reproduction of fish and other aquatic life. A pH below 6.0 limits the growth and reproduction of fish. A pH between 6.0 and 7.0 is ideal for fish. The median pH value for the epilimnion (upper layer) in New Hampshire's lakes and ponds is **6.6**, which indicates that the surface waters in the state are slightly acidic. For a more detailed explanation regarding pH, please refer to the "Chemical Monitoring Parameters" section of this report.

The mean pH at the deep spot this season ranged from **6.34** in the hypolimnion to **6.92** in the epilimnion, which means that the water is ***slightly acidic.***

It is important to point out that the pH in the hypolimnion (lower layer) was ***lower (more acidic)*** than in the epilimnion (upper layer). This increase in acidity near the lake bottom is likely due the decomposition of organic matter and the release of acidic by-products into the water column.

Due to the presence of granite bedrock in the state and acid deposition (from snowmelt, rainfall, and atmospheric particulates) in New Hampshire, there is not much that can be done to effectively increase lake pH.

- **Table 5: Acid Neutralizing Capacity**
  Table 5 (Appendix B) presents the current year and historical epilimnetic ANC for each year the lake has been monitored through VLAP.

  Buffering capacity (ANC) describes the ability of a solution to resist changes in pH by neutralizing the acidic input. The median ANC value for New Hampshire's lakes and ponds is **4.9 mg/L**, which indicates that many lakes and ponds in the state are at least "moderately vulnerable" to acidic inputs. For a more detailed explanation, please refer to the "Chemical Monitoring Parameters" section of this report.

  The mean Acid Neutralizing Capacity (ANC) of the epilimnion (the upper layer) was **6.1 mg/L** this season, which is ***slightly greater than*** the state median. In addition, this indicates that the lake is ***moderately vulnerable*** to acidic inputs (such as acid precipitation).

- **Table 6: Conductivity**
  Table 6 (Appendix B) presents the current and historical conductivity values for tributaries and in-lake data. Conductivity is the numerical expression of the ability of water to carry an electric current (which is determined by the number of negatively charged ions from metals, salts, and minerals in the water column). The median conductivity value for New Hampshire's lakes and ponds is **40.0 uMhos/cm**. For

a more detailed explanation, please refer to the "Chemical Monitoring Parameters" section of this report.

The mean annual conductivity in the epilimnion at the deep spot this season was **56.41 uMhos/cm**, which is ***greater than*** the state median.

The conductivity has ***increased*** at the **deep spot** and in the **Lake Avenue Tributary, Sucker Brook,** and the **Outlet** since monitoring began. Typically, sources of increasing conductivity are due to human activity. These activities include failed or marginally functioning septic systems, agricultural runoff, and road runoff (which contains road salt during the spring snow melt). New development in the watershed can alter runoff patterns and expose new soil and bedrock areas, which could contribute to increasing conductivity. In addition, natural sources, such as iron and manganese deposits in bedrock, can influence conductivity.

We also recommend that your monitoring group conduct a shoreline conductivity survey of the lake and the tributaries with ***elevated*** conductivity to help pinpoint the sources conductivity to the lake.

To learn how to conduct a shoreline or tributary conductivity survey, please refer to the 2004 "Special Topic Article" or contact the VLAP Coordinator.

We recommend that your monitoring group conduct chloride sampling in the epilimnion at the deep spot and in the inlets near salted-roadways, particularly in the spring, soon after snow-melt and after rain events during the summer. This will establish a baseline of data that will assist your monitoring group and DES to determine lake quality trends in the future.

Please note that there will be an additional cost for each of the chloride samples and that these samples must be analyzed at the DES laboratory in Concord. In addition, it is best to conduct chloride sampling in the spring as the snow is melting and during rain events.

We also recommend that the association work with watershed residents to reduce the use of salt on private roads, driveways, and walkways. Watershed residents should be encouraged to implement a "low salt diet" for their property. For guidance, please read the 2005 DES Greenworks Article "Salt: An Emerging Issue for Water Quality" (January 2005) which can be accessed at www.des.nh.gov/gw0105.htm or from the VLAP Coordinator.

- **Table 8: Total Phosphorus**
  Table 8 (Appendix B) presents the current year and historical total phosphorus data for in-lake and tributary stations. Phosphorus is the nutrient that limits the algae's ability to grow and reproduce. Please refer to the "Chemical Monitoring Parameters" section of this report for a more detailed explanation.

  The total phosphorus concentration was ***particularly elevated*** in the **Gagnes Brook** sample on the **August** sampling event **(66 ug/L)** as was the turbidity of the sample **(12.3 NTUs).**

  The total phosphorus concentration was ***elevated*** in the **Lake Avenue Tributary** sample on the **June, July 24,** and **August** sampling events **(39, 70, and 61 ug/L, respectively).** The turbidity of each sample was ***slightly elevated*** **(1.23, 1.83, and 2.65 NTUs, respectively).**

  The total phosphorus concentration was ***elevated*** in the **Robidoux** sample on the **June, July 24,** and **August** sampling events **(42, 33, and 28ug/L, respectively).** The turbidity of each sample was ***slightly elevated*** **(1.71, 4.3, 3.58 NTUs, respectively).**

  The total phosphorus concentration was ***elevated*** in the **Sucker Brook** sample on the **June** sampling event **(40 ug/L)** and the turbidity was ***slightly elevated*** **(3.92 NTUs).**

  Each of these tributaries has a history of ***elevated*** and ***fluctuating*** phosphorus concentrations which suggests that erosion may be occurring in these areas of the watershed.

  If you suspect that erosion is occurring in these areas of the watershed, we recommend that your monitoring group conduct a stream surveys and storm event sampling along the tributaries of concern.

  For a detailed explanation on how to conduct rain event sampling and stream surveys, please refer to the 2002 VLAP Annual Report "Special Topic Article" or contact the VLAP Coordinator.

- **Table 9 and Table 10: Dissolved Oxygen and Temperature Data**
  Table 9 (Appendix B) shows the dissolved oxygen/temperature profile(s) for the 2005 sampling season. Table 10 (Appendix B) shows the historical and current year dissolved oxygen concentration in the hypolimnion (lower layer). The presence of dissolved oxygen is vital to fish and amphibians in the water column and also to bottom-dwelling organisms. Please refer to the "Chemical Monitoring Parameters"

section of this report for a more detailed explanation.

The dissolved oxygen concentration was ***lower in the metalimnion (middle layer) and the hypolimnion (lower layer) than in the epilimnion (upper layer)*** at the deep spot of the lake on the **August** sampling event. As stratified lakes age, and as the summer progresses, oxygen typically becomes ***depleted*** in the hypolimnion by the process of decomposition. Specifically, the loss of oxygen in the hypolimnion results primarily from the process of biological breakdown of organic matter (i.e.; biological organisms use oxygen to break down organic matter), both in the water column and particularly at the bottom of the lake where the water meets the sediment.

During this season, and many past sampling seasons, the lake has had a lower dissolved oxygen concentration and a higher total phosphorus concentration in the hypolimnion (lower layer) than in the epilimnion (upper layer). These data suggest that the process of ***internal phosphorus loading*** is occurring in the lake. When oxygen levels are depleted to less than 1 mg/L in the hypolimnion **(as it was this season and in many past seasons)**, the phosphorus that is normally bound up with metals in the sediment may be re-released into the water column. Since an internal source of phosphorus in the lake may be present, it is even more important that watershed residents act proactively to minimize phosphorus loading from the watershed.

- **Table 11: Turbidity**

Table 11 (Appendix B) lists the current year and historical data for in-lake and tributary turbidity. Turbidity in the water is caused by suspended matter, such as clay, silt, and algae. Water clarity is strongly influenced by turbidity. Please refer to the "Other Monitoring Parameters" section of this report for a more detailed explanation.

As discussed previously, the hypolimnetic turbidity has been ***at least slightly elevated*** on most sampling events since monitoring began. This suggests that the pond bottom is covered by a thick organic layer of sediment which is easily disturbed. When the pond bottom is disturbed, sediment, which typically contains attached phosphorus, is released into the water column. When collecting the hypolimnion sample, make sure that there is no sediment in the Kemmerer Bottle before filling the sample bottles.

Also discussed previously, the turbidity and phosphorus level was elevated in many of the inlet tributaries on numerous sampling events this season which suggests that erosion is occurring in the watershed.

- **Table 12: Bacteria (*E.coli*)**
  Table 12 lists the current year and historical data for bacteria *(E.coli)* testing. (Please note that Table 12 now lists the maximum and minimum results for this season and for all past sampling seasons.) *E. coli* is a normal bacterium found in the large intestine of humans and other warm-blooded animals. *E.coli* is used as an indicator organism because it is easily cultured and its presence in the water, in defined amounts, indicates that sewage **MAY** be present. If sewage is present in the water, potentially harmful disease-causing organisms **MAY** also be present.

  The *E.coli* concentration in the **Gagnes Brook** sample was ***elevated*** **(110 counts per 100mL)** on the **August** sampling event.

  The *E.coli* concentration in the **Lake Avenue Tributary** sample was ***elevated*** **(240 counts per 100mL)** on the **August** sampling event.

  The *E.coli* concentration in the **Robidoux** sample was ***elevated*** **(greater than 500 counts per 100mL)** on the **June** sampling event which is ***greater than*** the state standard for Class B waters. The results were ***lower,*** and ***less than*** the state standard for Class B waters, in this location on the **July 13, July 27,** and **August** sampling events **(200, 270, and 320 counts per 100 mL, respectively**), but were still ***elevated.***

  The *E.coli* concentration in the **Sucker Brook** sample was ***elevated*** **(1820 counts per 100mL)** on the **June** sampling event and was ***much greater than*** the state standard for Class B waters. The results were ***much lower*** in this location on the **July 13, July 27,** and **August** sampling events **(10, less than 10, and 90 counts, respectively**).

  If residents are concerned about sources of bacteria in these areas such as failing septic systems, animal waste, or waterfowl waste, it is best to conduct *E. coli* testing when the water table is high, when beach use is heavy, and during rain events.

- **Table 14: Current Year Biological and Chemical Raw Data**
  This table lists the most current sampling season results. Since the maximum, minimum, and annual mean values for each parameter are not shown on this table, this table displays the current year "raw" (meaning unprocessed) data. The results are sorted by station, depth zone (epilimnion, metalimnion, and hypolimnion) and parameter.

- **Table 15: Station Table**
  As of the Spring of 2004, all historical and current year VLAP data are included in the DES Environmental Monitoring Database (EMD). To facilitate the transfer of VLAP data into the EMD, a new station identification system had to be developed. While volunteer monitoring groups can still use the sampling station names that they have used in the past (and are most familiar with), an EMD station name also exists for each VLAP sampling location. For each station sampled at your lake, Table 15 identifies what EMD station name corresponds to the station names you have used in the past and will continue to use in the future.

DATA QUALITY ASSURANCE AND CONTROL

Annual Assessment Audit:

During the annual visit to your lake, the biologist conducted a "Sampling Procedures Assessment Audit" for your monitoring group. Specifically, the biologist observed the performance of your monitoring group while sampling and filled out an assessment audit sheet to document the ability of the volunteer monitors to follow the proper field sampling procedures (as outlined in the VLAP Monitor's Field Manual). This assessment is used to identify any aspects of sample collection in which volunteer monitors fail to follow proper procedures, and also provides an opportunity for the biologist to retrain the volunteer monitors as necessary. This will ultimately ensure that the samples that the volunteer monitors collect are truly representative of actual lake and tributary conditions.

Overall, your monitoring group did an ***excellent*** job collecting samples on the annual biologist visit this season! Specifically, the members of your monitoring group followed the proper field sampling procedures and there was no need for the biologist to provide additional training. Keep up the good work!

Sample Receipt Checklist:

Each time your monitoring group dropped off samples at the laboratory this summer, the laboratory staff completed a sample receipt checklist to assess and document if the volunteer monitors followed proper sampling techniques when collecting the samples. The purpose of the sample receipt checklist is to minimize, and hopefully eliminate, future re-occurrences of improper sampling techniques.

Overall, the sample receipt checklist showed that your monitoring group did an ***excellent*** job when collecting samples and submitting them to the laboratory this season! Specifically, the members of your monitoring group followed the proper field sampling procedures and there was no need for the laboratory staff to contact your group with questions, and no samples were rejected for analysis.

USEFUL RESOURCES

Best Management Practices to Control Nonpoint Source Pollution: A Guide for Citizens and Town Officials, NHDES Booklet WD-03-42, (603) 271-2975.

Cyanobacteria in New Hampshire Waters Potential Dangers of Blue-Green Algae Blooms, NHDES Fact Sheet WMB-10, (603) 271-2975 or www.des.state.nh.us/factsheets/wmb/wmb-10.htm.

Erosion Control for Construction in the Protected Shoreland Buffer Zone, NHDES Fact Sheet WD-SP-1, (603) 271-2975 or www.des.state.nh.us/factsheets/sp/sp-1.htm.

Impacts of Development Upon Stormwater Runoff, NHDES Fact Sheet WD-WQE-7, (603) 271-2975 or www.des.state.nh.us/factsheets/wqe/wqe-7.htm.

Lake Protection Tips: Some Do's and Don'ts for Maintaining Healthy Lakes, NHDES Fact Sheet WD-BB-9, (603) 271-2975 or www.des.state.nh.us/factsheets/bb/bb-9.htm.

Low Impact Development Hydrologic Analysis. Manual prepared by Prince George's County, Maryland, Department of Environmental Resources. July 1999. To access this document, visit www.epa.gov/owow/nps/lid_hydr.pdf or call the EPA Water Resource Center at (202) 566-1736.

Low Impact Development: Taking Steps to Protect New Hampshire's Surface Waters NHDES Fact Sheet WD-WMB-16, (603) 271-2975 or www.des.state.nh.us/factsheets/wmb/wmb-17.htm.

Proper Lawn Care In the Protected Shoreland, The Comprehensive Shoreland Protection Act, NHDES Fact Sheet WD-SP-2, (603) 271-2975 or www.des.state.nh.us/factsheets/sp/sp-2.htm.

Road Salt and Water Quality, NHDES Fact Sheet WD-WMB-4, (603) 271-2975 or www.des.state.nh.us/factsheets/wmb/wmb-4.htm.